Equivalent Ratios

Different Ways to Find Equivalent Ratios

<table>
<thead>
<tr>
<th>Way 1: Multiply each term by the same number.</th>
<th>Way 2: Divide each term by the same number.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\frac{3}{9} = \frac{3 \times 2}{9 \times 2} = \frac{6}{18}$</td>
<td>$\frac{3}{9} = \frac{3 \div 3}{9 \div 3} = \frac{1}{3}$</td>
</tr>
</tbody>
</table>

Write four equivalent ratios for each.

1. $\frac{2}{5}$  
2. $3:7$  
3. $2$ to $9$  
4. $\frac{1}{6}$  
5. $2:4$  
6. $4$ to $7$  
7. $\frac{6}{5}$  
8. $5$ to $8$

Write each ratio in simplest form.

9. $16:24$  
10. $35$ to $14$  
11. $20:15$  
12. $24$ to $72$  
13. $42:14$  
14. $50$ to $75$  
15. $30:45$  
16. $28$ to $35$

Complete each set of equivalent ratios.

17. $\frac{8}{3} = \frac{\square}{24}$  
18. $\frac{6}{21} = \frac{\square}{7}$  
19. $\frac{13}{52} = \frac{1}{\square}$

Problem Solving

20. Three copies of a book cost $20. Write an equivalent ratio to show the cost of 9 copies.

Show Your Work